Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.

In the Matter of	)	
	)	
Revision of the Commission's Rules	)	CC Docket No. 94-102
To Ensure Compatibility with	)	RM-8143
Enhanced 911 Emergency Calling Systems	)	

REPLY COMMENTS OF THE CELLULAR TELECOMMUNICATIONS INDUSTRY ASSOCIATION IN SUPPORT OF PETITIONS FOR RECONSIDERATION

The Cellular Telecommunications Industry Association ("CTIA")[1] hereby submits its Comments in support of the petitions for reconsideration filed in the above-captioned proceeding.[2] CTIA supports technology-neutral rules that provide carriers (and the public they serve) with the greatest choice of location solutions. Technology choice and a market-based approach to implementation should be the hallmarks of the Commission's rules for wireless E911 Phase II automatic location information ("ALI").[3]

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[1] CTIA is the international organization of the wireless communications industry for both wireless carriers and manufacturers. Membership in the association covers all Commercial Mobile Radio Service ("CMRS") providers and manufacturers, including 49 of the 50 largest cellular and broadband personal communications service ("PCS") providers. CTIA represents more broadband PCS carriers and more cellular carriers than any other trade association.

[2] *See Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems,* CC Docket No. 940102, *Third Report and Order,* FCC 99-245 (October 6, 1999) *published in* 64 Fed. Reg. 60126 (Nov. 4, 1999)("*Third Report and Order*"). Three petitions seeking reconsideration of the *Third Report and Order* were filed: Petition for Reconsideration of Nokia Inc. and Motorola Inc., CC Docket 94-102 (December 6, 1999); Sprint PCS Petition for Reconsideration, CC Docket 94-102 (December 6, 1999); Petition for Reconsideration of Aerial Communications, Inc., CC Docket 94-102 (December 6, 1999).

[3] The Commission's rules also should be competitively neutral. The *Third Report and Order* seemingly satisfies this requirement -- the record indicates that carriers

Two parties filed oppositions to the Petitions: KSI, Inc.,[4] and the Association of Public-Safety Communications Officials-International, Inc. ("APCO").[5] Both KSI and APCO argue that the "regulatory uncertainty" from reconsideration would outweigh any benefits associated with a rule change.[6] The Commission, however, has stated that its intent was "to permit the broadest range of technical solutions to be employed to achieve ALI compliance,"[7] and the record on reconsideration clearly demonstrates that the Phase II E911 ALI rules adopted in the *Third Report and Order* fail to meet this goal. Based on this record, grant of the petitions will best serve the public interest.

Because the Phase II E911 ALI rules mandate accuracy requirements that differ based on the technology selected by a carrier, they are not neutral. Both Aerial and Sprint demonstrate in their Petitions that the new Phase II E911 ALI rules for handset-

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representing each of the four digital air interfaces are in agreement that the Commission's accuracy and phase-in dates for Phase II E911 ALI are not achievable. See *Comments of Nextel Communications, Inc.* (filed February 22, 2000) at 6 ("Nextel cannot state ... that 25% of its iDEN handsets will be ALI-capable by October 2001"); *Comments of AT&T Wireless Services, Inc.* (filed February 22, 2000) at 3 (AT&T has been unable to confirm the commercial availability of any ALI technology for carriers using TDMA technology "that will fully meet the accuracy standards and timing requirements" of the *Third Report and Order); Comments of Aerial Communications, Inc.* (filed February 22, 2000) at 2 (Aerial, a GSM carrier, believes "the increased accuracy requirements may remove any handset-based solution as a viable option for wireless operators to use"); and *Comments of US West Wireless, LLC* (filed February 22, 2000) at 4 ("no handset- or network-based [ALI] solutions are commercially available" for CDMA carriers).

4 *KSI Inc. Opposition to Petitions for Reconsideration* (filed February 22, 2000)("*KSI Opposition*").

5 *Opposition of APCO to Petitions for Reconsideration of Third Report and Order* (filed February 22, 2000)("*APCO Opposition*").

6 *KSI Opposition* at 3; *APCO Opposition* at 2.

7 *Third Report and Order* at ¶ 19.

based technologies preclude non-GPS location technologies.[8] In its Opposition, APCO asserts that the "higher accuracy levels imposed [on handset-based technologies] in the *Third Report and Order* are essential for there to be effective Phase II location technology."[9] But APCO never suggests that the *Third Report and Order* requirement of 100 meter location accuracy for 67 percent of calls for network-based ALI technologies is insufficient.[10] Indeed, the lack of any challenge from public safety to the network-based accuracy requirements demonstrates that "effective" Phase II location information is provided to the public at the level of accuracy mandated for network-based technologies.[11] If a given level of accuracy is sufficient for one type of location technology, it must also be sufficient for all others.

While CTIA does not believe that the Commission can establish a double standard for the level of location accuracy required to protect the public interest, CTIA agrees with the Commission that other aspects of its rules do not have to be identical to be technology neutral.[12] In this regard, CTIA urges the Commission to complete its work in developing

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8 *See Aerial Petition* at 3 (the E-OTD solution contemplated by Aerial is in effect removed by the increased accuracy levels for handset-based ALI technologies); *Sprint Petition* at 10 (the FLT solution contemplated by Sprint PCS is in effect removed by the accuracy levels for handset-based ALI).

9 *APCO Opposition* at 4.

10 47 C.F.R. § 20.18(g)(1). These rules also permit 300 meter Phase II location accuracy for 28% of all 911 calls.

11 Indeed, if the lesser accuracy required of network-based location technologies did not serve the public interest, the Commission would have erred in requiring carriers to invest billions of dollars in a location solution that did not meet the needs of public safety. *See Sprint PCS Petition* at n.11 (under the FCC's own cost estimates, ubiquitous deployment of the network solution would cost at least $1 billion, and perhaps as much as $3 billion or more).

12 *See Third Report and Order* at ¶ 81.

verification and compliance standards for the Phase II location technologies.[13] Handset- and network-based technologies have very different accuracy characteristics depending on where they are deployed. For example, handsets can be expected to have a clear view of the GPS constellation in rural areas where carriers may not have the multiple base stations needed by some network-based technologies. On the other hand, in a dense urban setting, a network may have multiple base stations, but a handset may face an obstructed view of the sky. As Nokia and Motorola note in their Petition, the lack of verification and compliance methods "underscore the premature and untested nature of the new accuracy requirements adopted by the Commission in the *Third Report and Order*."[14] In the absence of test procedures, neither carriers nor location technology vendors can make informed technology choices.

Not only must the Commission resolve how it will adopt technology neutral rules that accommodate the different verification and compliance requirements associated with competing technologies, it also must review and clarify its different implementation rules for handset- and network-based location solutions to be sure they are technology neutral. Here again, handset- and network-based technologies require different rules, and carriers cannot make an informed technology choice until the Commission addresses the implementation issues raised in the Petitions and Comments.

In particular, the Commission should take this opportunity to clarify carriers' responsibilities to accommodate individual PSAP requests to deploy Phase II E911

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[13] The Commission's Wireless Telecommunications Bureau and Office of Engineering and Technology have sought and received comment on the development of verification and compliance methods, but have not provided any guidance to the wireless industry.

[14] *Nokia and Motorola Petition* at 7.

location capability within much larger geographic serving areas. The Commission should address in this proceeding how carriers and their distribution channels, whether based on the Rand-McNally "trading areas" (which attempt to define marketing areas) or nationwide marketing, can accommodate such a request. For example, if Arlington County, Virginia, requested Phase II E911 location capability for its PSAP, would carriers favoring a handset-based location technology be required to provide Arlington residents with a different (and assumedly more expensive) handset than the non-location capable handsets available to Alexandria residents.[15] And would every distribution channel throughout the multistate (or even national) market have to stock both types of handsets. What about retail distribution channels, such as Radio Shack and Best Buys? Would their Arlington County stores be permitted to sell a non-location capable handset to an Arlington resident with a Washington, DC mobile directory number? To borrow from tax law concepts, would the customer's *situs* be determined by the NPA-NXX associated with the handset, by the customer's billing address, or by the customer's residence?[16] To maintain technology and competitive neutrality, the Commission's requirements for the phase-in of Phase II location capabilities must accommodate the differences in technology without favoring one approach over another.

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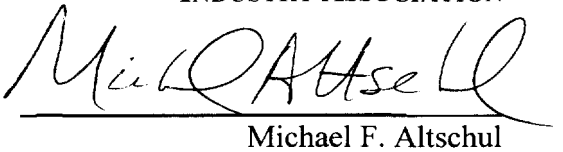
[15] A different set of similar questions would apply to carriers seeking to deploy a network-based location technology. For example, how would carriers recover the costs of a limited deployment initiated at a single PSAP's request?

[16] The market-based solution that would best address the "practical realities" of implementing a handset-based location technology would provide customers, not PSAPs, with the choice of adopting first generation handsets. The number of handsets that customers could purchase would increase as more handset models become available. *See Sprint Petition* at 12. Under this approach, consumer demand for Phase II ALI capabilities, and not regulatory mandates, would dictate the pace of introduction. Similar market forces could be harnessed by carriers choosing to deploy network-based location technologies.

Technology choice and a market-based approach to implementation should be the hallmarks of the Commission's rules for wireless E911 Phase II ALI. In addition, the Commission immediately must address the compliance and verification, as well as the implementation issues raised in the Petitions and Comments so wireless carriers can make an informed decision in advance of the Commission's October 1, 2000, deadline for declaring their choice of location technology.[17] For the foregoing reasons, CTIA urges the Commission to grant the petitions and adopt on reconsideration rules that embrace technology choice and a market-based approach to implementation of the Phase II E911 ALI rules.

Respectfully submitted,

CELLULAR TELECOMMUNICATIONS INDUSTRY ASSOCIATION



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March 3, 2000

[17] 47 C.F.R. § 20.18(h).

I hereby certify that I have this 3rd day of March, 2000, served a copy of the foregoing Cellular Telecommunications Industry Association's Reply Comments, in CC Docket No. 94-102, by United States Mail, first class, postage prepaid, on the persons listed below.

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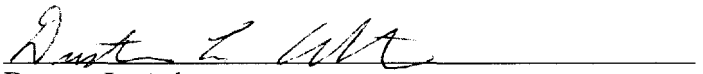

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